

# United States Patent [19]

Skyllas-Kazacos et al.

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## [54] ALL-VANADIUM REDOX BATTERY

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### Related U.S. Application Data

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### [30] Foreign Application Priority Data

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[58] Field of Search ..... 429/105, 101, 106-109, 429/12-14, 17, 19, 51, 72, 203-205

## [56]

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## [57]

### ABSTRACT

Charged and uncharged all-vanadium redox batteries are disclosed. Also described are a process for charging the uncharged battery and a process for producing electricity from the charged battery. A process for recharging an all-vanadium redox battery which has been at least partially discharged is also disclosed.

110 Claims, 5 Drawing Sheets

